e-Publishing

Designer and Viewer 6.5
Upgrade Summary
for IMT/Forms Designers

Air Force Departmental Publishing Office

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Introduction

This document provides a condensed summary of changes that have been implemented in PureEdge Designer and Viewer 6.5. These topics were extracted from the following PureEdge documents:

- Designer version 6.5, Release Notes, dated May 13, 2005
- Viewer version 6.5, Release Notes, dated June 20, 2005

For more complete information, please review the Designer and Viewer documents that are available by accessing

> **Start…Programs…PureEdge Designer 6.5… Release Notes**
> or
> **Start…Programs…PureEdge Viewer 6.5…PureEdge Viewer**
ReadMe…ReleaseNotes_en_us.txt

Version 6.5 of the Designer includes extensive changes both to the Designer product and to the underlying XFDL language. This document does not address XFDL and API upgrades in detail.

1. Designer 6.5 New Features

This section reflects the new and upgraded features of Designer 6.5 that differ from its previous version 2.3.

1.1 Backwards Compatibility

Designer 6.5 opens IMTs of any version. Designer 6.5 will give the designer the option to upgrade IMTs created in previous versions to the new version of Designer. Once the IMT has been upgraded, it **cannot** be opened in older versions of Designer.

Furthermore, Designer 6.5 is compatible with extensions (.ifx files) compiled with the version 4.5 API or later. Extensions compiled with earlier versions of the API will not work with this version of the Designer.

1.2 File Extension

The Designer now defaults to using the .xfdl file extension rather than .xfd. This addresses some incompatabilities with other software that also uses the .xfd extension.

When a form is opened, the Designer will maintain the original extension for the form. However, when the Designer saves a new form or writes temporary files, it will default to .xfdl.

The Designer still supports the .xfd extension, and will continue to do so in the future.

1.3 Changed Settings for type Option

The Designer now respects settings of "saveform" and "saveas" for the type option. "saveform" saves the form to the current file, while "saveas" prompts the user for a filename and location before saving.

The "save" setting has been deprecated. As such, future versions of the Designer may drop support for it, and you should update your forms to use the new settings.

1.4 Support for Silanis Signatures

The Designer now supports Silanis signatures, and allows you to add Silanis signatures to your forms. Silanis signatures include a new No-Lock feature. When a Silanis signature is set to No-Lock, the data that is signed is not locked in the Viewer. In other words, the user can change that data in the Viewer even though it has already been signed. This will invalidate the signature, but the changes can then be approved by a second signature. For more information about Silanis signatures, refer to the Designer Help.

Before you can use Silanis signatures, you must install the ApproveIt Desktop software from Silanis.

1.5   Support for No-Delete Signatures

The Designer now suports No-Delete signatures. Any signature type can be set to No-Delete, which means that signature cannot be deleted in the Viewer's signature dialog.

No-Delete signatures are created by adding a "delete" parameter to the signformat option. For more information, refer to the XFDL Specification.

1.6   Support for Signature Pad Signatures

The Designer now allows you to create signature pad signatures. These signatures allows the user to sign a form by using hardware that captures their written signature, called a signature pad.

For more information about this type of signature, refer to the signformat option in the XFDL Specification.

1.7   Dropped Support for CIC Signatures

The Designer no longer supports CIC signatures.

1.8   New Smartfill Feature

The Designer now supports a new feature called Smartfill. This feature automatically completes portions of a form for users while working in the Viewer. For example, SmartFill can automatically add the user's name and address to the form they are filling out.

The Designer allows you to add Smartfill information to the form, and set up portions of the form that should be completed automatically for the user.

For more information, refer to the Designer Help and the guide entitled, "Using the XML Data Model."

1.9   Support for New Calendar Widget

The Designer now supports a calendar widget. This allows the user to pick a date from a calendar rather than typing in a date.

You can create a calendar widget in two ways:

  - Create a combobox with no cells, and give it a date format.

  - Use the showCalendar function.

  For more information, refer to the XFDL Specification.

1.10 Schema Support

The Designer now supports the use of schemas for validating the XML Data Model in an XFDL form. For more information, refer to the Designer Help or the guide entitled, "Using the XML Data Model".

1.11 Support for webservices Option and Web Services

The Designer now supports the inclusion of Web Services in XFDL forms. This allows you to use Web Services within a form as though they were regular XFDL functions. For more information, refer to the Designer Help and the webservices option in the XFDL Specification.

1.12 Limited Support for Requirements Feature

The Requirements feature allows form designers to specify that certain functionality must be available before a user can open a form. For example, some forms may require a Java Virtual Machine.

The Designer now respects requirements settings, and automatically sets specific requirements when you add Web Services to your form. (Web Services require both a Java Virtual Machine and a particular Viewer Extension.)

However, the Designer does not allow you specify your own requirements, or to edit existing requirements (unless you use code view).

For more information about the Requirements feature, refer to the XFDL Specification.

1.13 Change to dateToSeconds Function

The dateToSeconds function includes a new parameter that allows to you define which format to use when interpreting the date provided. For more information, refer to the XFDL Specification.

1.14 Support for printvisible Option

The Designer now supports the printvisible option. This option controls whether an item is visible or not when the form is printed, and can be set from the Appearance tab in the Properties dialog box.

If you have relied on the global.global.activated option to turn item invisible during printing, you should update your forms to use the printvisible option instead. The behavior of the global.global.activated option may change in future releases.

For more information, refer to the XFDL Specification.

1.15 Support for printing Option

The Designer now supports the printing option. This global option indicates whether the Viewer is printing the form.

If you have relied on the global.global.activated option to determine when the form is printing, you should update your forms to use this new option. The behavior of the global.global.activated option may change in future releases.

For more information, refer to the XFDL Specification.

1.16 Multiline Computes

To place computes on multiple lines for easier readability, you must place a new line entity reference wherever you want to break a line. The new line entity reference is

For example:

```
<custom:my_opt xfdl:compute = "toggle(activated, &#xA;
  'off',  'on') == '1' ? &#xA;
  set('convertedDate.value', &#xA;
  sample_package.convertDate(theDate.value, &#xA;
  theLocale.value)) : ""></custom:my_opt>
```

2. Designer Fixes

The following features in Designer 6.5 have been corrected from previous versions of Designer.

2.1 Incorrect Computes No Longer Deleted

If you type a compute that is not syntactically correct into the compute dialog, you will now have to either correct or delete the compute before you can leave the dialog box. Formerly, the Designer detected the incorrect compute and automatically deleted it.

2.2 Fixed Spelling Checker Problems

The Spelling Checker now correctly highlights items that contain misspelled words and changes to the correct page when highlighting an item in a multi-page form.

2.3 Fixed Problem Upgrading Compressed Binary Forms

Fixed a problem that prevented users from upgrading forms that were saved as compressed binary files.

2.4 Fixed Problem Changing sid of Signature Button

Fixed a problem that caused the Designer to crash ifyou changed the sid of a signature button.

2.5 Fixed Problem Changing Name of Signature Buttons

Fixed a problem that produced a run-time error if you changed the name (sid) of a signature button in a particular scenario.

2.6 Fixed Display Problem at High Resolutions

Fixed a problem that sometimes caused labels to either wordwrap or chop off text at high resolutions.

2.7 Fixed Problem Displaying XML Model in Tree View

Fixed a problem that prevented the XML Data Model from being displayed in the Tree View window if the Tree View was open before the XML Data Model was created.

3. Discontinued Designer Features

The following features are no longer supported in Designer version 6.5.

3.1 Dropped Windows 95 Support

Windows 95 is no longer supported and the Designer is no longer tested in this environment. See WGM section below.

3.2 Dropped Support for UFDL

ICS Designer no longer supports the Universal Forms Description Language (UFDL). Furthermore, files with a .ufd or .ufdl extension are no longer recognized and the application/vnd.ufdl MIME type is no longer supported.

4. Designer 2.3 WGM Concerns

The following features are pertinent to Workgroup Managers when installing Designer 6.5.

4.1 Designer Requires Administrator Access to Install

The Designer Install package no longer works under Power User access. You now need Administrator access to install the Designer under later versions of Windows.

Note: Once the Designer is installed, you can still run it as either an Administrator or a Power User.

4.2 System Requirements

Windows 95 is no longer supported and the Designer is no longer tested in this environment.

Minimum System Requirements:
>   Operating System: Windows 98/2000/XP
>   Processor: 500 Mhz
>   RAM: 256 MB
>   Disk space: 40 MB
>   Resolution: 1024 x 768 in 16-bit color

Recommended System Requirements:
>   Operating System: Windows 2000/XP
>   Processor: 1.5 Ghz
>   RAM: 512 MB
>   Disk space: 40 MB
>   Resolution: 1024 x 768 in 16-bit color

Other Requirements:
>   Web Browser: IE 4.0 or later (for online help)
>   PureEdge Viewer: PureEdge Viewer 6.5 (for previewing forms)

Note: Note that you must be an Administrator to install the Designer under later versions of Windows. However, you can run the Designer in user mode.

5. Viewer 6.5 New Features

5.1 Support for XFDL 6.5

The Viewer now supports XFDL 6.5 IMTs. See Viewer 6.5 release notes for details.

5.2 Backwards Compatibility

Viewer 6.5 supports XFDL version 4.4 and later. ICS Viewer 6.0 is compatible with extensions (.ifx files) compiled with the version 4.5 API or later. Extensions compiled with earlier versions of the API will not work with Viewer 6.0.

5.3 Support for Silanis Signatures

The Viewer now supports Silanis signatures. This includes a No-Lock feature that is specific to Silanis signatures.

When a Silanis signature is set to No-Lock, the data that is signed is not locked in the Viewer. In other words, the user can change that data in the Viewer even though it has already been signed. This will invalidate the signature, but the changes can then be approved by a second signature. For more information about these signatures, refer to the PureEdge Viewer User's Manual.

No-Lock signatures are created by adding a "lock" parameter to the signformat option for Silanis signatures. For more information, refer to the XFDL Specification.

Before you can sign a form using a Silanis signature, you must install the ApproveIt Desktop software from Silanis.

5.4 Support for No-Delete Signatures

The Viewer now supports No-Delete signatures. Any signature type can be set to No-Delete, which means that the signature cannot be deleted through the signature dialog. For more information about No-Delete signatures, refer to the PureEdge Viewer User's Manual.

No-Delete signatures are created by adding a "delete" parameter to the signformat option. For more information, refer to the XFDL Specification.

5.5 New Toolbar Functionality

The Viewer now has two save buttons in the toolbar: "Save Form" and "Save As". The Save Form button now saves the form to the current file without prompting the user. The Save As button prompts the user for a filename and location before saving the form.

Additionally, the following hotkey now triggers a Save As: SHIFT + CTRL + S.

If you are using the ufv_settings option to control the appearance of the save button, be aware that both save buttons are now controlled by the "save" flag in the menu setting. See the "Using Viewer Settings" document for more information.

5.6 Printing Headers and Footers

The Viewer now supports printing multi-line headers and footers. Additionally, the Viewer now scales headers and footers more accurately when shrinking them to fit the page (see section 3.8). For more information about using headers and footers, refer to the Using Viewer Functions document.

5.7 Changed Settings for type Option

The Viewer now respects settings of "saveform" and "saveas" for the type option. "saveform" saves the form to the current file, while "saveas" prompts the user for a filename and location before saving.

Note that if a form has been opened from the web, "saveform" will prompt the user for a filename and location, because these are not set until the form has been saved for the first time.

The "save" setting, which behaves like saveas, has been deprecated. As such, future versions of the Viewer may drop support for it, and you should update your forms to   use the new settings.

5.8 Support for Portal Environments

The Viewer can now be embedded in an HTML page through use of the HTML <object> tag, allowing the Viewer to return XFDL data from a portal environment.

Note that this feature is only supported in Internet Explorer 6.0 browsers.

For more information refer to the guide entitled, "Embedding the Viewer in HTML".

5.9 File Extension

The Viewer now defaults to using the .xfdl file extension rather than .xfd. This addresses some incompatibilities with other software that also uses the .xfd extension.

When a form is opened, the Viewer will maintain the original extension for the form. However, when the Viewer writes temporary files, or if the Viewer saves a file that does not already have an extension set, it will default to .xfdl.

The Viewer still supports the .xfd extension, and will continue to do so in the future.

5.10 Support for Signature Pad Signatures

The Viewer now allows users to sign forms by using hardware that captures their written signature, called a signature pad.

Users require signature pad hardware and software (such as that available from Interlink or Topaz), as well as a special add-on to the Viewer, before they can use signature pads. However, the Viewer will verify signature pad signatures with no additional hardware or software.

For more information about this type of signature, refer to the following documents:

- XFDL Specification (signformat option)
- Creating Digital Signature Buttons in XFDL
- Best Practices for Form Design

5.11 Installer Removes Previous Viewers

The Viewer's installer now attempts to remove all previous versions of the Viewer from the computer. This ensures that the right registry entries are being used.

Running an older version of the Viewer will reset the registry entries, and will prevent the new Viewer from running properly.

5.12 Support for Netscape 7.1 Certificates

The Viewer now supports the new Netscape 7.1 certificate database. Older Netscape certificate databases and older versions of Netscape certificates imported into the new database are also supported.

5.13 Support for Mozilla Browsers

The Viewer now supports Mozilla 1.7.

5.14 Support for signarrayrefs Option

The Viewer now supports the signarrayrefs option. This option specifies individual arrays that are filtered for a particular signature.

For more information, refer to the XFDL Specification.

5.15 Scrolling Using the Mouse Wheel

You can now scroll a form page by using the mouse wheel.

5.16 Support for Additional Screen Readers

The Viewer now relies on the MSAA (Microsoft Active Accessibility) standard to communicate with screen readers. This means the Viewer will work with any MSAA compliant screen reader.

5.17 Viewer Opens to Blank Form

If you run the Viewer executable directly, the Viewer now opens to display a blank form page rather than an "Open Form" dialog box. To open a form from the blank page, simply click "Open Form" in the toolbar.

6. Viewer 6.5 Fixes

6.1 Fixed Issue When Verifying Certificate Chains

When the Viewer checks a certificate chain, it normally creates the chain by matching the Authority Key Identifier of the certificate to the Subject Key Identifier of the Issuer. However, in cases in which the issuing certificate does not have a Subject Key Identifier but the issued certificate has an Authority Key Identifier (such as when a version1 certificate is used to create a version3 certificate), this check was failing.

In these cases, the Viewer will now fall back on matching certificate names to create the chain. This method is already used when neither the certificate nor the issuer has the proper extensions.

6.2 Fixed Problem with Toggle

Fixed a problem with the toggle function that occurred only when using pre-6.0 forms with a version 6.0 or later API. In this case, instance data associated with the toggle was not properly deregistered. This could cause odd behavior with the toggle function if a single instance of a program, such as a servlet using the PureEdge API, loaded a form multiple times and evaluated the computes in that form. This could also affect the performance of any custom Viewer extensions (.ifx files) that maintained instance data.

Note that this problem did not directly affect the Viewer, as a different instance of the Viewer is launched for each form viewed. However, as mentioned, custom Viewer extensions may have been affected.

6.3 Fixed Memory Leak

Fixed a memory leak that occurred when a digital signature could not be verified.

6.4 Fixed Decompression Problem

Fixed a problem that prevented base64-gzip compressed forms and enclosures from decompressing properly if they were larger than 25 million bytes in size.

6.5 Improved Tablet Support

Fixed a problem with stylus entry into fields with templates. Previously, templated fields could not recognize stylus entries.

Some limitations continue to exist:

- Cannot paste a string into a field with a template.
- Cannot highlight and replace characters with a stylus.
- Cannot undo in a field with a template.

6.6 Fixed Problems with Actions

Fixed two problems regarding actions:

- Corrected problem where actions with a delay of '-1' prevented subsequent actions from activating.
- Corrected problem where actions with a delay of 'once' were not activating.

6.7 Fixed Problem with Double Submits

Fixed a problem when using submit buttons with Netscape 7.x browsers. Using a button which performed a Post submission caused the submit process to occur twice.

6.8 Fixed Problem with activated Option

Fixed a problem that was introduced in version 6.1. This problem prevented the activated option from operating correctly, so that buttons, cells, and actions did not always trigger correctly.

6.9 Fixed Problem with signnamespaces Option

Fixed a problem in Viewers 6.0 and 6.1 where the signnamespaces option was not correctly implemented. This problem prevented namespaces from being filtered by the signature.

6.10 Fixed Font Problem with Headers/Footers

Fixed a problem that caused headers and footers to print with the wrong font. They were using the font from the first item in the form rather than the default font.

6.11 Fixed Problem Printing Rich Text

Fixed a problem that prevented rich text fields from printing properly on some printers when the field was large.

7. Discontinued Viewer Features

7.1 Dropped Support for CIC Signatures

The Viewer no longer supports CIC signatures.

7.2 Removed Support for signarrayrefs Option

The Viewer no longer supports the signarrayrefs option.
Furthermore, the Viewer does not offer backward
compatibility for this option, regardless of the
version of XFDL in use.

8. Viewer 6.0 WGM Concerns

8.1 Running the Viewer as a User

You can now run the Viewer as a regular User under Windows (rather than as an Administrator or Power User).

8.2 Windows 2000/XP

To install the Viewer under Windows 2000/XP, you must be logged onto Windows as an Administrator.

8.3 User Profiles

The Viewer now respects user profiles under Windows. The Viewer must be installed using an Administrator profile, but is then managed and licensed through individual user profiles. Refer to the installation and licensing sections of the Viewer User's Manual for more information.

Note: Roaming profiles are not supported.

8.4 Network Access

Previous versions of the Viewer included two network access modes: online and offline. The Viewer now supports the following four modes:

- online: user is online.
- online with backup: user is online and a backup copy of the last IMT submitted is retained.
- offline: user is offline and is prompted to save IMTs rather than submitting them.
- offline with archiving: user is offline and the Viewer automatically archives submitted IMTs.

The Network Access is set in the Viewer's Basic Preferences. Refer to the Viewer User's Manual for more information.

8.5 MAPI Support On By Default

The Viewer now defaults to using the active MAPI client when sending email. If you do not have a MAPI client available, you can change this setting in the Viewer Preferences.

8.6 Copying IFX Extensions from Older Viewers

The Viewer no longer copies IFX extension files from older versions of the Viewer during installation. You must copy these files manually.

8.7 Setting Computes for Fields

You cannot use computes to set the justify option or to set an editstate of writeonly.

8.8 Using Eudora or Netscape as MAPI Client for the Viewer

If you want to use Netscape Messenger or Eudora as the Viewer's e-mail program, you will first need to turn on MAPI support in these applications. However, this option is not available in Netscape versions prior to 4.5 or in version 6.1.

To enable MAPI support:

In Netscape, go to Preferences > Mail & News Groups settings.

In Eudora, go to Options > MAPI settings.

You then need to set PureEdge Viewer's preferences. Go to the Viewer Preferences form and select "Use Default Simple MAPI Client" under "Mail Configuration" in Basic settings.

8.9 Text Fields

Text fields that the Viewer displays can support up to 500K of text. If you try to insert more than 500K of text (about 7,500 lines in a 60-character wide field), the text will be truncated at the 500K mark.

8.10 Moving Back and Forward in a Web Browser

If you start to fill out a form while using the Viewer in a browser, then open a new web page or file in the same browser window, you will lose the information you have entered into the form.

8.11 Giving the Focus to Input Items that Overlap Labels

When input items (such as fields, buttons, popups, lists, comboboxes, radios, and check boxes) are placed on top of labels, you cannot use the mouse to give the items the focus or to interact with the item (for example, you cannot click a check box to turn it on or off). You must use the TAB key to move to the item and the keyboard to enter information in the item.

8.12 Installing Viewer 6.5 with ICS Designer 2.0 or Earlier

If you install Viewer 6.5 on the same computer as ICS Designer 2.0 or earlier, you may receive warning messages when you open the Designer. Viewer 6.5 installs updated .ifx files that older versions of the Designer cannot process properly. If you encounter this problem, upgrade the Designer to version 6.5.

8.13 Standalone Viewer and Netscape 6.x

When running in standalone mode, the Viewer cannot use Netscape 6.x for communications. Instead, it will default to using the WinINet communications libraries that are installed with Windows. This has two effects:

1. When any non-XFDL document is returned, the Viewer will not be able to open Netscape 6.x to display that document. Instead, the document will open in either Internet Explorer or an earlier version of Netscape, if they are available.

2. SSL certificates installed in Netscape are not available to the Viewer. To correct this problem, either ensure that the Viewer is running within the browser (as a plugin) or ensure that your SSL certificates are installed in IE.

8.14 Accessing the Netscape Certificate Store

The Viewer will only access the certificate store in the most recent version of Netscape installed on your computer. If you install a certificate in an earlier version of Netscape, and have a later version installed, the Viewer will not be able to access that certificate.

To correct this, ensure that all of your certificates are installed in the latest supported version of Netscape that is on your computer.

8.15 Using the Keyboard to Move the Focus from the Address Bar in Netscape

Under Netscape 6.0 or later, you can normally press the TAB key twice to move from the address bar to the contents of the browser (in this case, to the form). However, when using a plugin, Netscape will generate an application error rather than move the focus to the document.

Under Netscape 4.x, there is no keyboard support for moving the focus from the address bar.

For these reasons, we suggest you use Internet Explorer rather than Netscape if you are using screen reader mode and must rely on keyboard controls.

8.16 Underlined Text on Buttons when in Screen Reader Mode

If you are using JAWS, JAWS will mistakenly report any button that displays underlined text as a hotkey. JAWS always reports the hotkey as an 'ALT' combination with the first letter of the underlined text. For example, a button that read "Click me" in underlined text would be reported as having an 'ALT + C' hotkey. The hotkey is not actually available in these cases.

8.17 Dynamically Changing RTF Fields to Plain Text

The Viewer does not support dynamically changing RTF fields to plain text. Attempting to do so may result in unexpected behavior.

8.18 Using Rich Text in Fixed Size Fields

Do not use rich text in fixed size fields. Rich text does not support the level of precision required to properly limit the text within the constraints of the field. In many cases, formatting and printing will cause the text to extend beyond the boundaries of the field.

8.19 Application/X-XFDL MIME type

The use of the x-xfdl MIME type is no longer recommended. However, this version of the Viewer continues to support this MIME type to maintain backward compatibility with older forms. Use the application/vnd.xfdl MIME type instead.

8.20 Supported Virtual Machines

When using Java, the Viewer supports the Sun Java Virtual Machine version 1.2 or later.

9. Viewer Troubleshooting

9.1 Unrecognized MIME Type Error Message When Viewing IMTs in a Web Browser

If you receive an error message announcing an unrecognized MIME type when you try to open a IMT in a web browser, then your web browser is unable to find ICS Viewer. This may be because the setup program was unable to find the web browser during installation.

To fix this problem, you will have to setup the Viewer manually. Refer to the "Installation Notes" section in the readme_en_US.txt file for more information.

9.2 Viewer Launching As Stand-alone Application

If your IMTs are opening in a stand-alone ICS Viewer, instead of in the browser window, then the setup program was unable to automatically install the browser extension in your web browser's plugins directory.

To fix this problem, you will have to setup the Viewer manually. Refer to the "Installation Notes" section in the readme_en_US.txt file for more information.

9.3 Viewing IMTs in IE 5, 5.01, 5.01 SP1, 5.5, 5.5 SP1

When you open an IMT from a web site, you may receive an error message (such as "The page cannot be displayed") instead of viewing the IMT. This happens because the Active Document Server is looking for a cached copy of the IMT and cannot find one. You can still open the IMT by refreshing the browser (click the refresh button).

To fix this on the server, you will need to remove any cache control information from the HTTP headers. For more information, refer to the following Microsoft Knowledge Base article: Q297822.